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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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12/31/2003

Bo Yeoun Jo

20059/PIA31075

8861

34431

7590

06/07/2006

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EXAMINER

CHAUDHARI, CHANDRA P

ART UNIT

PAPER NUMBER

2891

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

The drawings were received on March 21, 2006. These drawings are not acceptable.

Figures 1A-1D should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art and Jung – US 2003/0114010.

See reasons of record in the office action of October 3, 2005.

Applicant's arguments filed on March 21, 2006 have been fully considered but they are not persuasive.

The drawings filed on October 25, 2005 had the correct label of "PRIOR ART". The drawings filed on March 21, 2006 are objected to as above. The specification clearly states that Figs. 1A-1D are

of a “known MIM capacitor and a known manufacturing process”, and “showing a conventional manufacturing process of an MIM semiconductor device”. In addition, the Korean priority document on page 16-4 states Figs. 1A-1D as being “Prior technique”. Hence, one can clearly use Figs. 1A-1D as being admitted prior art.

Applicant's admitted prior art discloses substantially the claimed invention in paragraphs 5-11 as described in the office action of October 3, 2005. The admitted prior art discloses that a polymer is generated on the lower metal layer during an etching step. Jung may obviously be combined with applicant's admitted prior art to remove the photoresist and residue and polymer using the same plasma as claimed. The time and flow rates may reasonably be adjusted and optimized depending on the thicknesses of the photoresist, metal, and insulation layers. The powers used by Jung are substantially the same. A flow rate of a CF_4 gas is clearly in a range from 5% to 15% of that of an H_2O gas (40/300 is ~13%). Jung, at paragraph 56, states that the photoresist strip and cleaning process can be applied to any other photoresist strip and cleaning processes fabricating various openings whose substructure is formed of a metal hole, line, or bar. Hence, Jung efficiently removes the photoresist and residue, and polymer to decrease device resistance. If an applicant contends that additional steps or materials in the prior art are excluded by the recitation of “consisting essentially of,” applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-**

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MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandra Chaudhari whose telephone number is 571-272-1688. The examiner can normally be reached on Mon - Fri (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Baumeister can be reached on 571-272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chandra Chaudhari

Primary Examiner

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Chandra Chaudhari

May 26, 2006